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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/652,010 | 08/31/2000 | Katsuyuki Naito | 196880US | 2943 |

22850 7590 05/06/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

VUONG, BACH Q

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2653

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DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/652,010

Applicant(s)

NAITO ET AL.

Examiner

Bach Q Vuong

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-13 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,14,17 and 20 is/are rejected.
- 7) ☒ Claim(s) 2,5-7,15,16,18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

This communication is responsive to an amendment filed on 02/18/04

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 14, 17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Yanagisawa et al. (US 5,389,475).

Yanagisawa et al., according to Figs. 1, 2, 10 and 11, shows a recording medium comprising all features of the claimed invention as interpreted as below:

Regarding claim 1, see Figs. 1 and 10 which show a recording medium comprising: a substrate (see substrate 111); a recording layer (see recording layer 113) overlying the substrate and having a plurality of charge accumulating regions each containing a first material capable of accumulating an electric charge; and a photoconductive layer (see photoconductive layer 114) formed on the recording layer and having a photoconductive region containing a second material whose conductivity is increased by light absorption.

Regarding claims 3 and 4, see Figs. 1 and 10 which show a recording medium further comprises at least one electrically insulating region which electrically insulates the plural charge accumulating regions from each other, and at least one electrically insulating region are juxtaposed to each other overlying the substrate (see recording medium 1 in Fig. 1D).

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Regarding claim 14, see Figs. 1, 2, 10 and 12 which show a recording apparatus comprising: a recording medium comprising a substrate (see substrate 111) and a recording layer (see recording layer 113) overlying the substrate and having a plurality of charge accumulating regions each containing a first material capable of accumulating an electric charge, the recording layer further comprising a photoconductive region (see photoconductive layer 114) containing a second material whose conductivity is increased by light absorption or the recording medium further comprising a photoconductive layer in contact with the recording layer and having the photoconductive region; and a recording head (see reference numbers 116-119 in Fig. 12) arranged to face the main surface of the recording medium and comprising a light emitting section emitting light toward the recording layer when writing information and an electrode being adjacent to the light emitting section and utilized in injecting an electric charge into at least one of the plural charge accumulating regions.

Regarding claim 17, see Figs. 1 and 10 which show a recording apparatus wherein the recording medium (see recording medium in Fig. 10) has a laminate structure of the recording layer overlying the substrate and the photoconductive layer formed on the recording layer.

Regarding claim 20, see Figs. 10 and 11 which show a recording method of recording information by injecting an electric charge into a charge accumulating region containing a first material capable of accumulating the charge, comprising: irradiating a photoconductive region arranged in contact with the charge accumulating region and containing a second material whose conductivity is increased by light absorption with light (see Fig. 11); and injecting an electric charge accumulating region via a portion of the photoconductive region irradiated with light (see the respective disclosure of Fig. 10 and 11).

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Allowable Subject Matter

Claims 2, 5-7, 15, 16, 18 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2, 5-7, 15, 16, 18 and 19 are allowable over the prior art of record because all the cited references, considered as closest prior art and viewed in combination or individually, fails to suggest or fairly teach an recording medium including a combination of all features as particularly recited in each of claims 2, 5-7, 15, 16, 18 and 19.

Claims 9-13 are allowed over the prior art of record because all the cited references, considered as closest prior art and viewed in combination or individually, fails to suggest or fairly teach an recording medium and a recording apparatus including a combination of all features as recited in each of claims 9 and 11. Claims 10, 12, 13 fall with their respective parent claim.

Cited References


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references relate to an optical recording medium and recording apparatus and method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bach Q Vuong whose telephone number is (703) 305-7355. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


PAUL W. HUBER
PRIMARY EXAMINER

BV
May 3, 2004